



FortiClient (Android) v5.0 Patch Release 1 User Guide



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Change Log

Date	Change Description
2013-10-24	Initial release.

Introduction

FortiClient (Android) v5.0 Patch Release 1 has been redesigned to include IPsec VPN, SSL VPN, Web Security, and Endpoint Control.

FortiClient (Android) v5.0 Patch Release 1 features

The following table lists and describes features supported in FortiClient (Android) v5.0 Patch Release 1.

Table 1: FortiClient (Android) features

Feature	Description
IPsec VPN	<ul style="list-style-type: none">• Configure IPsec VPN connections.• Client X.509 certificates and pre-shared key support.• Enable always up and auto connect options.
SSL VPN	<ul style="list-style-type: none">• Configure tunnel mode SSL VPN connections.• Client and server X.509 certificates support.• Enable always up and auto connect options.
Web Security	<ul style="list-style-type: none">• Allow or deny web browsing based on FortiGuard groups and categories.• Monitor web browsing violations.
Endpoint Control	<ul style="list-style-type: none">• Configure and deploy a FortiOS Endpoint Profile to registered FortiClient (Android) devices.• Provision a Web Category Filtering profile and VPN connections.• Policy enforcement.

Product Integration and Support

FortiOS support

FortiClient (Android) v5.0 Patch Release 1 supports FortiOS v5.0 Patch Release 3 or later.

Supported operating system

FortiClient (Android) v5.0 Patch Release 1 supports Android OS v4.0.4 or later.

Install FortiClient (Android) v5.0 Patch Release 1

You can download the FortiClient (Android) v5.0 Patch Release 1 application from the Google Play application or at the following link, <https://play.google.com/store>.

Open the Application

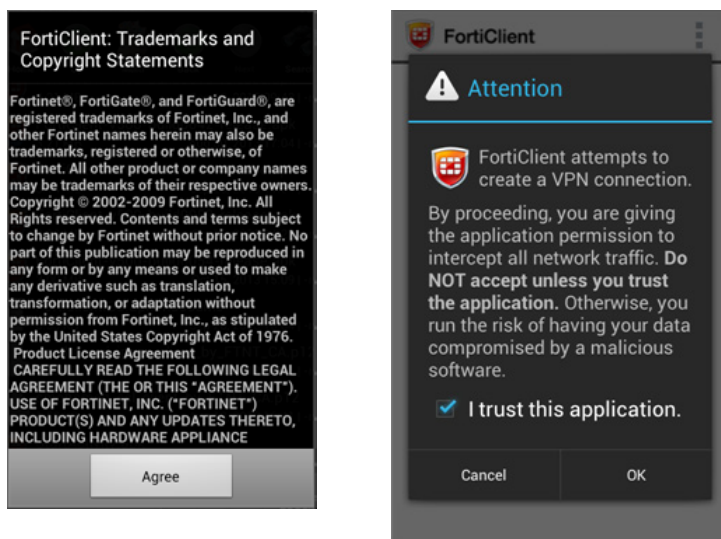
Open the application

When FortiClient (Android) v5.0 Patch Release 1 is installed and run for the first time, read the *Trademarks and Copyright Statement* and select the *Agree* button. FortiClient (Android) includes a Web Security feature to help protect your device from malicious sites. When opening FortiClient, you will be prompted to enable the Web Security feature. An *Attention* pop-up dialog window will be displayed noting the FortiClient attempts to create a VPN connection. Read the statement, select the *I trust this application* checkbox, and select *OK*. After that, FortiClient (Android) will automatically start when Android OS starts.

Figure 1: Opening pages



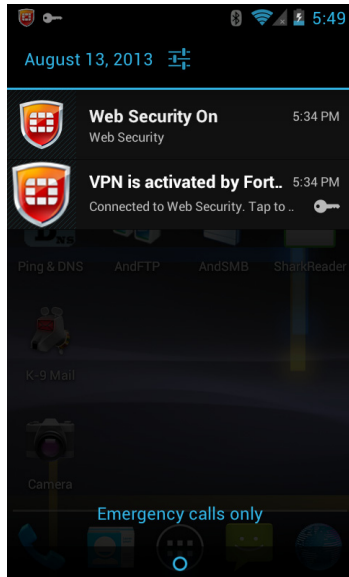
Figure 2: Trademarks and VPN message



Launch from the notification bar

FortiClient (Android) v5.0 Patch Release 1 allows you to launch the application from the notification bar.

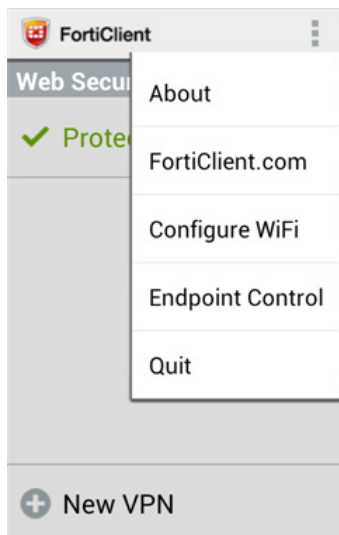
Figure 3: Launch from notification bar



Quit the application

You can quit the app from the menu page.

Figure 4: Quit from app menu



When the Web Security feature is enabled, FortiClient (Android) runs in the background to provide the service. To quit the application, go to the Android OS Settings page, select *Apps*, select *FortiClient*, and select *Force stop*. On this page you can also clear data and uninstall FortiClient (Android).

Figure 5: Apps page



Web Security

FortiClient (Android) v5.0 Patch Release 1 includes a web security feature to allow you to control web browsing on your Android device. You can select to allow or deny sites based on the FortiGuard site rating. The following table lists the web security groups and categories.

Table 2: Web security categories

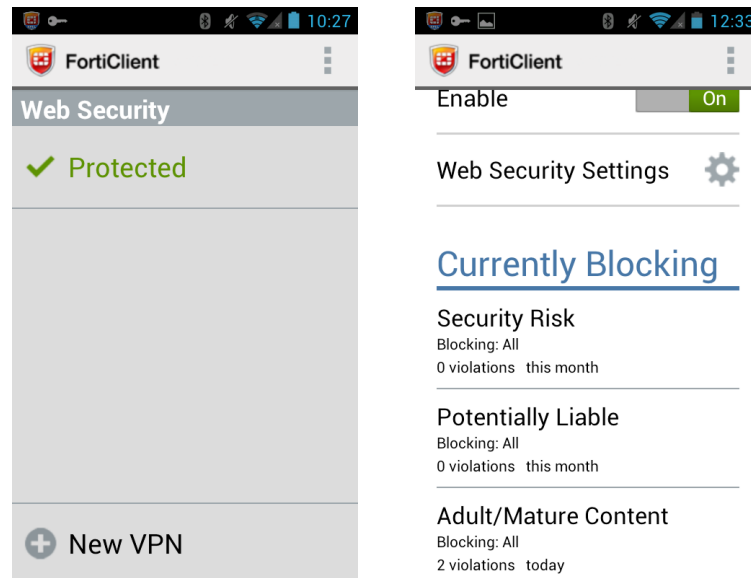
Groups	Categories
Security Risk	Malicious Websites, Phishing, Spam URLs
Potentially Liable	Drug Abuse, Extremist every..., Hacking, Illegal or Unethical, Discrimination, Proxy Avoidance, Explicit Violence, Plagiarism, Child Abuse
Adult/Mature Content	Gambling, Nudity and Risque, Pornography, Dating, Weapons (Sale..., Alternative Beliefs, Marijuana, Sex Education, Alcohol, Tobacco, Lingerie and Swimsuit, Sports Hunting and War Games, Abortion, Other Adult Materials, Advocacy Organizations
Bandwidth Consuming	Freeware and Downloads, File Sharing and Storage, Streaming Media and Download, Peer-to-peer File Sharing, Internet Radio and TV, Internet Telephony
General Interest - Business	Finance and Banking, Search Engines and Portals, General Organizations, Business, Information and Computer Security, Government and Legal Organizations, Information Technology, Armed Forces, Web Hosting, Secure Websites, Web-based Applications
General Interest - Personal	Advertising, Brokerage and Trading, Games, Web-based Email, Entertainment, Arts and Culture, Education, Health and Wellness, Job Search, Medicine, News and Media, Social Networking, Political Organizations, Reference, Global Religion, Shopping and Auction, Society and Lifestyles, Sports, Travel, Personal Vehicles, Dynamic Content, Meaningless Content, Folklore, Web Chat, Instant Messaging, Newsgroups and Message Boards, Digital Postcards, Child Education, Real Estate, Restaurant, Personal Websites and Blogs, Content Servers, Domain Parking, Personal Privacy
Unrated	Unrated

For more information on FortiGuard groups and categories, see <http://www.fortiguard.com/static/webfiltering.html>.

Web security status

The web security status will display *Protected* or *Unprotected*. When this feature is enabled, select *Protected* to view the blocked categories and the number of violations this month.

Figure 6: Protected status and currently blocking pages



Enable and disable web security

To enable web security, select *Unprotected*, then toggle the *Enable* switch to *On*. To disable web security, toggle the *Enable* switch to *Off*.



When FortiClient is managed by FortiGate Endpoint Control, user cannot enable or disable web security

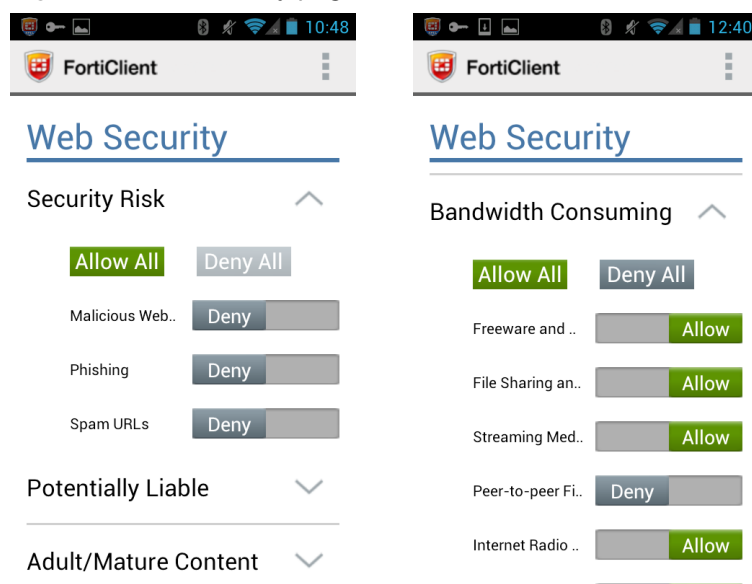
Web security settings

To change web security settings, select Web Security Settings. There are seven top level groups with various categories. When you select a top level group a drop-down menu will appear. You can select to *Allow All*, *Deny All*, or select to allow or deny each category independently.



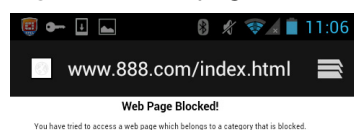
When FortiClient is managed by FortiGate Endpoint Control, web security setting is deployed from FortiGate, and user cannot change it.

Figure 7: Web security pages



When browsing to a website which falls into a category which is denied, you will receive a web page blocked page.

Figure 8: Web page blocked page



SSL VPN

FortiClient (Android) v5.0 Patch Release 1 supports tunnel mode SSL VPN connections. You can either configure the SSL VPN in the FortiClient user interface or provision SSL VPN connections in the FortiGate Endpoint Profile. Provisioned SSL VPN configurations are pushed to your Android device upon successful registration with the FortiGate device for Endpoint Control. You can configure X.509 certificates, CA server certificates, and check server certificates. You can also configure always up and auto connect for the VPN connection.

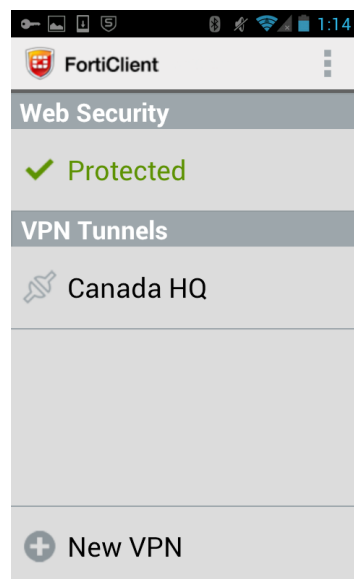
Create an SSL VPN connection

To create a new SSL VPN connection in the FortiClient (Android) user interface follow the steps listed below.

To create a new SSL VPN connection:

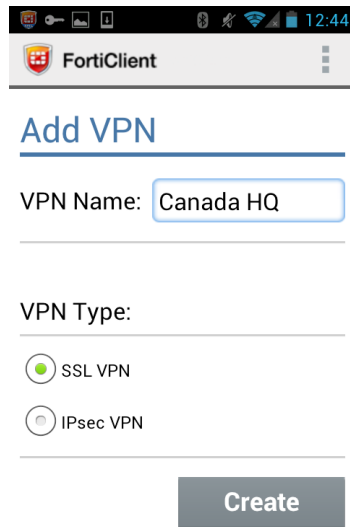
1. Select *New VPN* from the toolbar in the bottom of the page.

Figure 9: New VPN page



2. Enter a name for the new VPN connection, select *SSL VPN* under *VPN Type*, and select *Create*.

Figure 10:Add VPN settings page



FortiClient

Add VPN

VPN Name:

VPN Type:

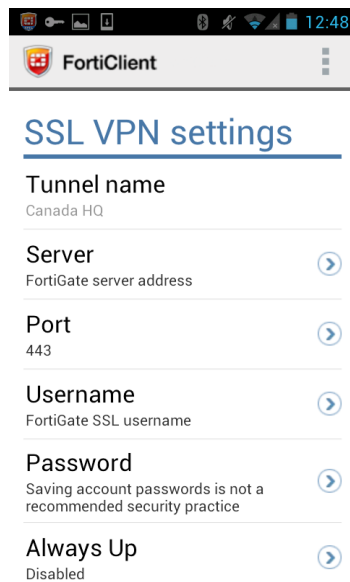
☒ SSL VPN

☐ IPsec VPN

Create

The SSL VPN settings page is displayed.

Figure 11:SSL VPN settings page



FortiClient

SSL VPN settings

Tunnel name
Canada HQ

Server
FortiGate server address

Port
443

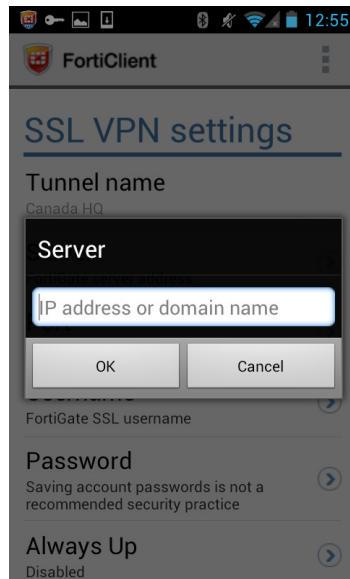
Username
FortiGate SSL username

Password
Saving account passwords is not a recommended security practice

Always Up
Disabled

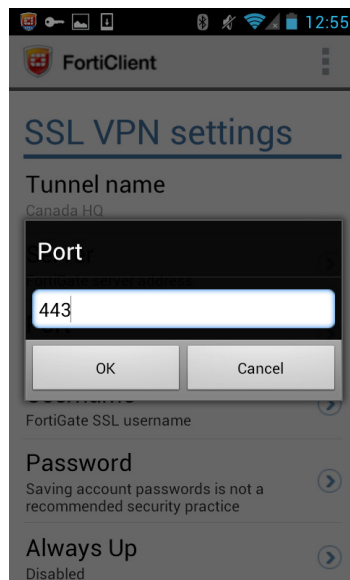
3. Select *Server*, enter the server IP address or domain name, and select *OK*.

Figure 12:Server dialog box



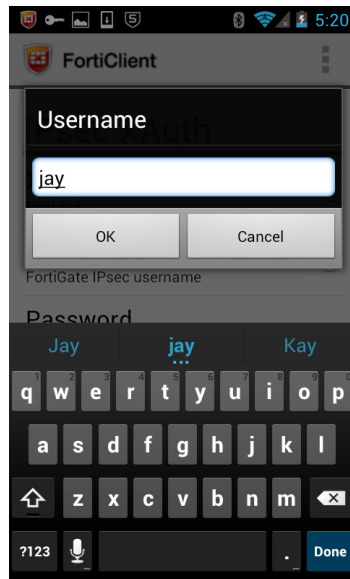
4. Select *Port*, enter the port number, and select *OK*. The default port is 443.

Figure 13:Port dialog box



5. Select *Username*, enter a username, and select *OK*.

Figure 14:Username dialog box

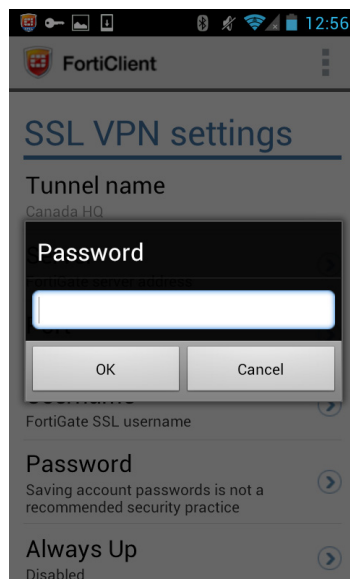


6. Select *Password*, enter a password, and select *OK*. There is no maximum value for the password length. The password can consist of alpha, numeric and special characters.



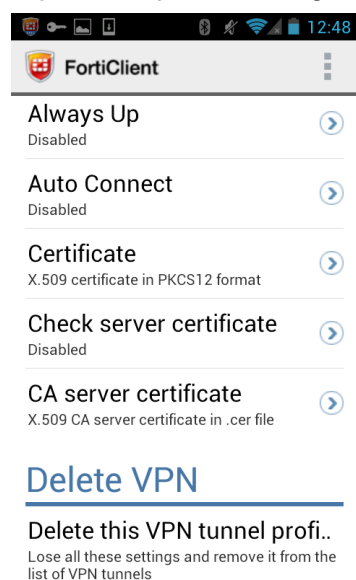
The username and password configured on the client must match the username and password configured on the FortiGate. Contact your network administrator for the correct setting.

Figure 15:Password dialog box



7. You can select to enable *Always Up*, *Auto Connect*, and *Check server certificate* in the *SSL VPN settings* page.

Figure 16:Optional settings



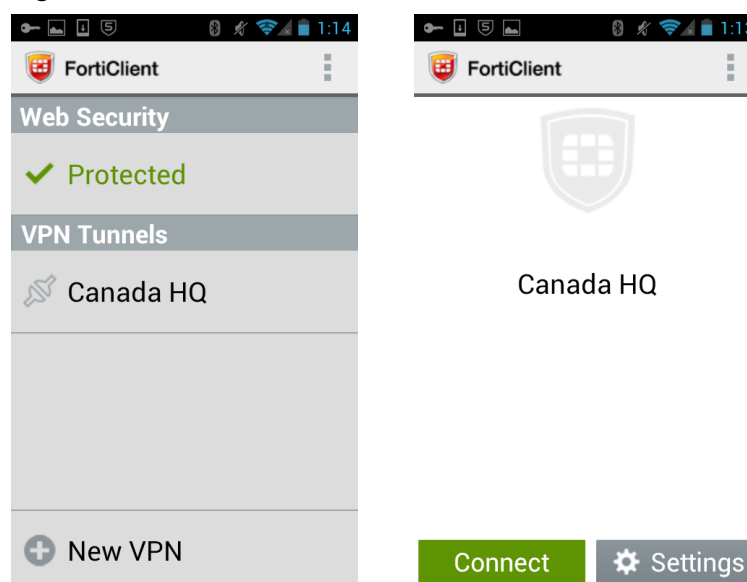
Connect to the VPN

SSL VPN tunnel mode uses X.509 Certificates (PKCS12 format) for authentication. Certificate settings need to be configured if authentication requires the client certificate, otherwise leave the certificate settings as their default value. For more information see [“Client and Server CA Certificates”](#) on page 16.

To connect to the SSL VPN:

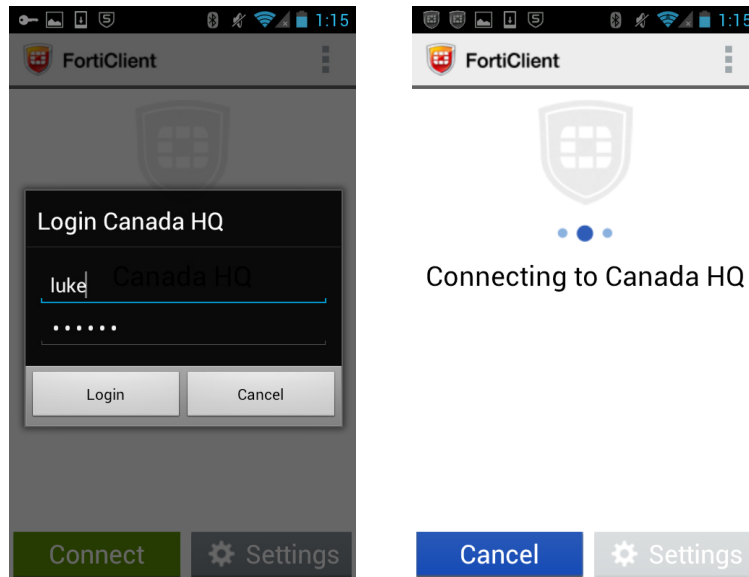
1. Select an available VPN and then select *Connect*.

Figure 17:VPN tunnels



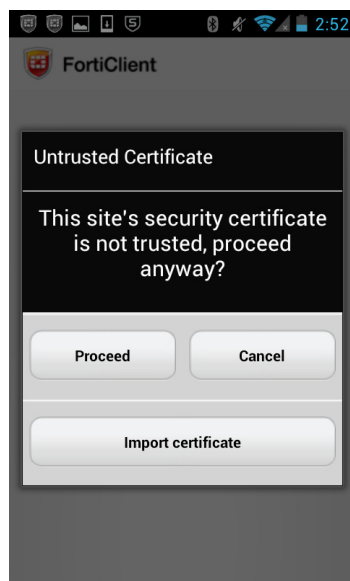
2. Enter your username and password and then select *Login*.

Figure 18: Login and connecting pages



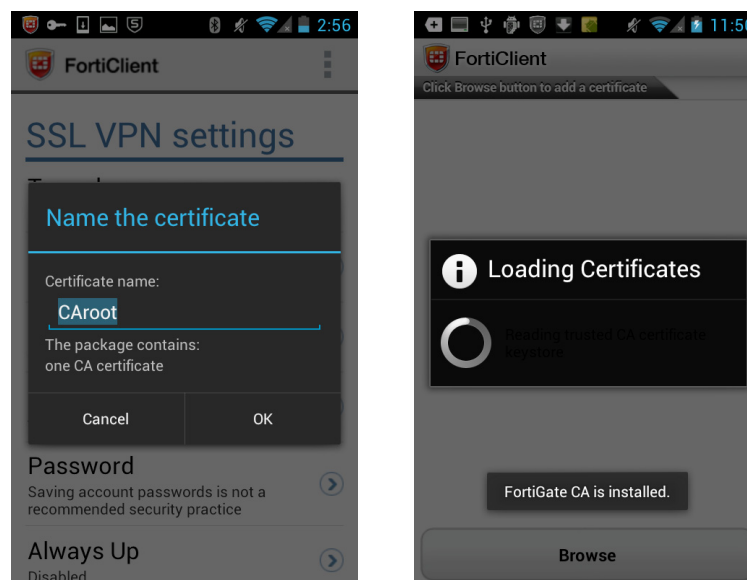
3. You will receive an *Untrusted Certificate* message dialog box warning message, and you will have the option to *Proceed*, *Cancel*, or *Import certificate*.

Figure 19: Untrusted Certificate dialog box



4. Select *Import certificate*, browse for the certificate file, edit the name (if required).

Figure 20:Certificate pages

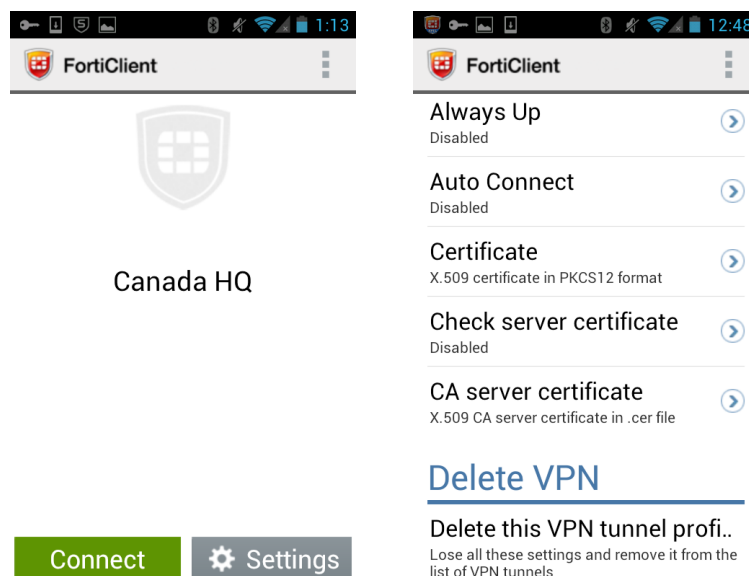


5. Select **OK** to load and install the certificate. The certificate is now installed on the device. Use the device back button to return to the connection screen.
6. Select an available VPN to connect.

Edit SSL VPN settings or delete a SSL VPN configuration

To edit SSL VPN settings or delete an existing SSL VPN configuration, select the SSL VPN, and select the *Settings* button.

Figure 21:VPN settings pages



IPsec VPN

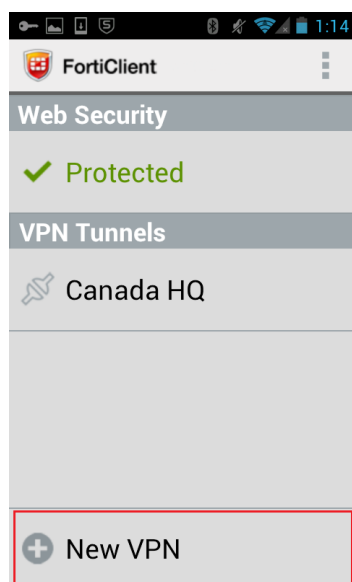
FortiClient (Android) v5.0 Patch Release 1 supports IPsec VPN connections. You can either configure the IPsec VPN in the FortiClient user interface or provision IPsec VPN connections in the FortiGate Endpoint Profile. Provisioned IPsec VPN configurations are pushed to your Android device upon successful registration with the FortiGate device for Endpoint Control. You can configure server settings, phase 1, phase 2, and XAuth settings.

Create an IPsec VPN connection

Create a new IPsec VPN connection:

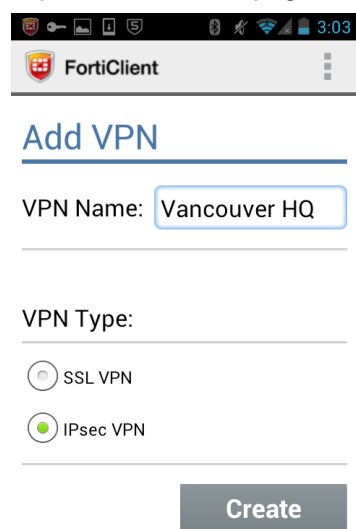
1. Select *New VPN* from the toolbar in the bottom of the page.

Figure 22:New VPN page



2. Enter a name for the new VPN connection, select *IPsec VPN* under *VPN Type*, and select *Create*.

Figure 23:Add VPN page



FortiClient

Add VPN

VPN Name: Vancouver HQ

VPN Type:

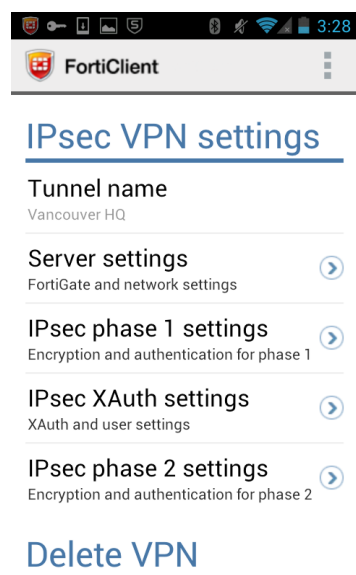
☐ SSL VPN

☒ IPsec VPN

Create

The IPsec VPN settings page is displayed.

Figure 24:IPsec VPN settings page



FortiClient

IPsec VPN settings

Tunnel name
Vancouver HQ

Server settings
FortiGate and network settings

IPsec phase 1 settings
Encryption and authentication for phase 1

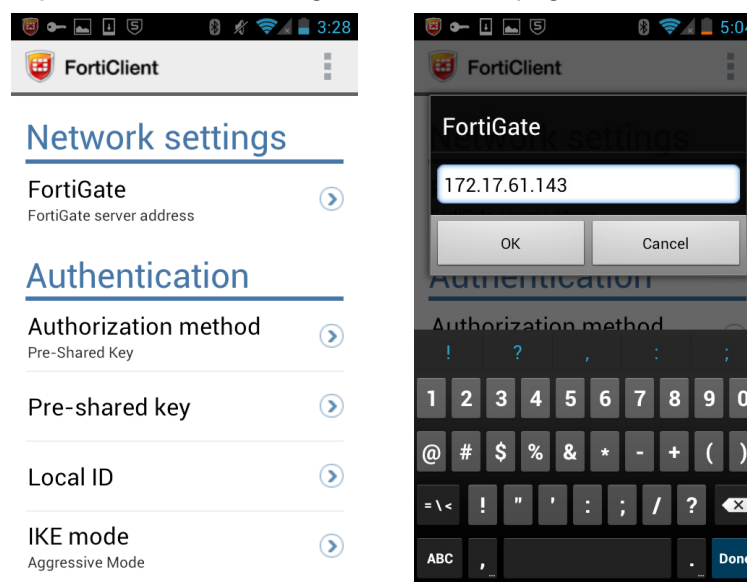
IPsec XAuth settings
XAuth and user settings

IPsec phase 2 settings
Encryption and authentication for phase 2

Delete VPN

3. Select *Server settings*, under *Network settings*, select *FortiGate*, enter the server IP address or domain name, and select *OK*.

Figure 25:Network settings and FortiGate pages



4. Under *Authentication*, select *Authorization Method*, and select either *Pre-Shared Key* or *X.509 Certificate*.
5. For pre-shared key, select *Pre-shared Key* to enter the pre-shared key value.

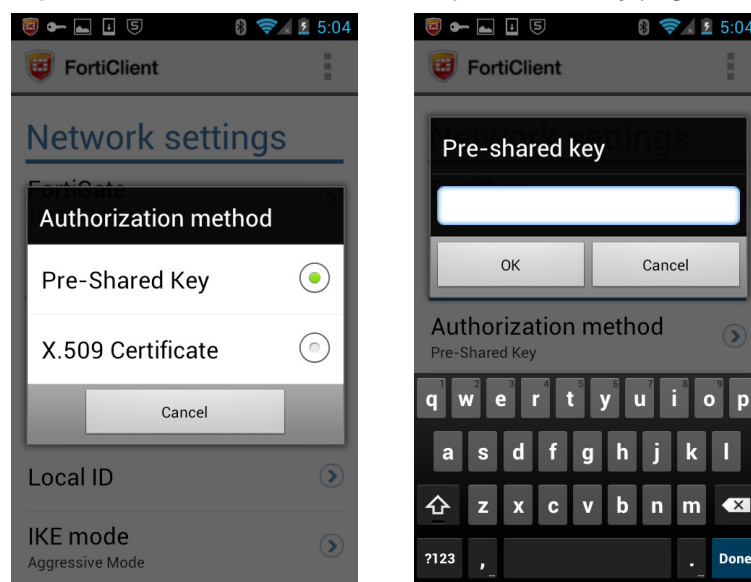
The simplest way to authenticate with the FortiGate unit is by means of a pre-shared key. This is less secure than using certificates, especially if it is used alone, without requiring peer IDs or extended authentication (XAuth).

The pre-shared key must contain at least 6 printable characters. For optimum protection against currently known attacks, the key must consist of a minimum of 16 randomly chosen alphanumeric characters.



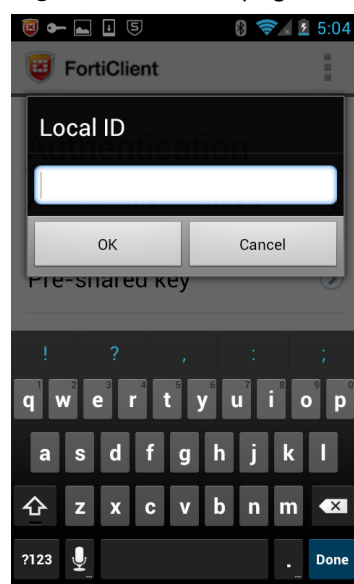
The pre-shared key configured on the client must match the pre-shared configured on the FortiGate. Contact your network administrator for the correct setting.

Figure 26:Authorization method and pre-shared key pages



6. Select Local ID, enter the local ID, and select OK.

Figure 27:Local ID page



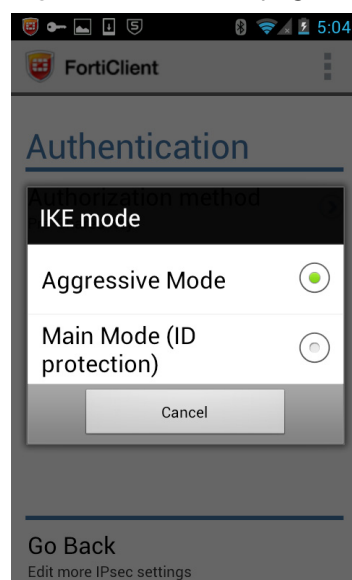
7. For X.509 certificate select *Certificate* and then browse for the certificate file on your device. To authenticate with the FortiGate unit using digital certificates, you must have the required certificates installed on the android device (peer) and the FortiGate unit (server).



Contact your network administrator for the correct X.509 certificate file.

8. Select *IKE mode*, and select *Aggressive Mode* or *Main Mode (ID protection)*.

Figure 28: IKE mode page



In Aggressive Mode, the phase 1 parameters are exchanged in single message with authentication information that is not encrypted.

In Main Mode, the phase 1 parameters are exchanged in multiple rounds with encrypted authentication information.



The IKE Mode selected on the client must match the mode selected on the server. Contact your network administrator for the correct setting.

9. Select *Go Back* to return to the IPsec VPN settings page.

10. Select *IPsec phase 1 settings* to view or edit the phase 1 proposal encryption and authentication settings. You can choose to use the default settings.

Select the encryption and authentication algorithms that will be used to generate keys for protecting negotiations. You can select any of the following symmetric-key algorithms:

- DES: Digital Encryption Standard, a 64-bit block algorithm that uses a 56-bit key.
- 3DES: Triple-DES, in which plain text is encrypted three times by three keys.
- AES128: A 128-bit block algorithm that uses a 128-bit key.

You can select one of the following message digests to check the authenticity of messages during phase 1 negotiations:

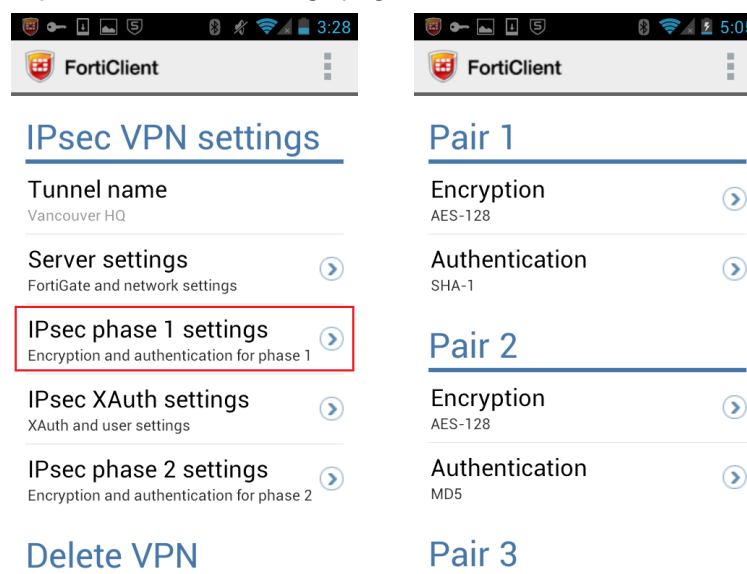
- MD5: Message Digest 5, the hash algorithm developed by RSA Data Security.
- SHA-1: Secure Hash Algorithm 1, which produces a 160-bit message digest.

Select one or more Diffie-Hellman groups from DH group 1, 2, 5, and 14. When using aggressive mode, DH groups cannot be negotiated.



Contact your network administrator for the correct phase 1 encryption and authentication algorithms, and DH group.

Figure 29:Phase 1 settings pages



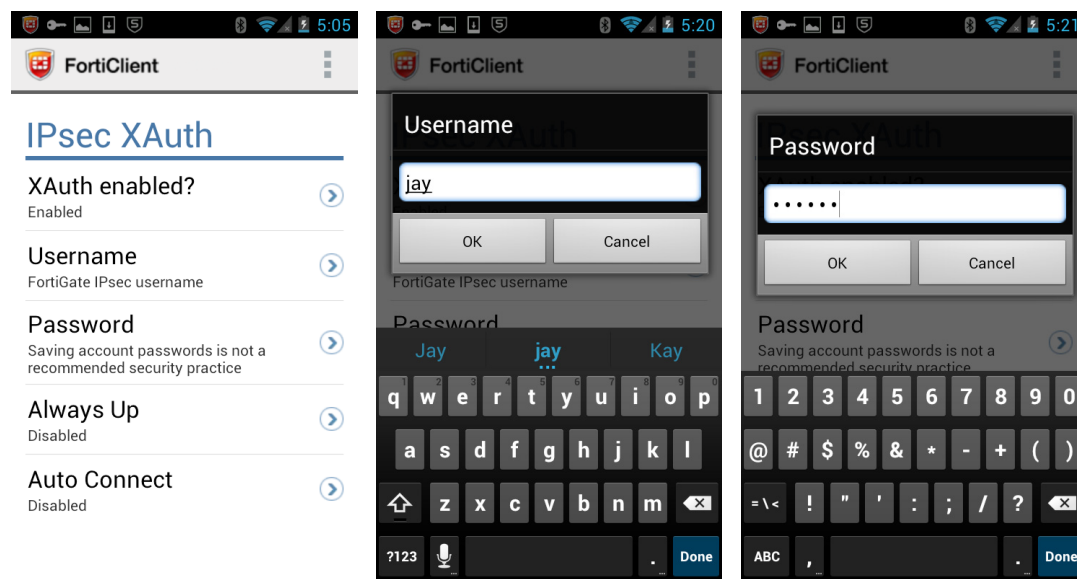
11. Select *Go Back* to return to the IPsec VPN settings page.

12. Select *IPsec XAuth settings* to view or edit the XAuth and user settings. XAuth is enabled by default. Select *Username* to enter the FortiGate IPsec username. Select *Password* to enter the password value. To use XAuth, you must first configure the user's credentials on your FortiGate, and external RADIUS or LDAP server.

Extended authentication (XAuth) increases security by requiring the remote dialup client user to authenticate in a separate exchange at the end of phase 1. XAuth draws on existing FortiGate user group definitions and uses established authentication mechanisms such as PAP, CHAP, RADIUS and LDAP to authenticate dialup clients.

You can select to enable *Always Up*, *Auto Connect*, and *Check server certificate* in the *IPsec XAuth* page.

Figure 30:XAuth username and password pages



13. Select *Go Back* to return to the IPsec VPN settings page.

14. Select *IPsec phase 2 settings* to view or edit the phase 2 encryption and authentication settings. You can choose to use the default settings.

Select the encryption and authentication algorithms that will be used to generate keys for protecting negotiations. You can select any of the following symmetric-key algorithms:

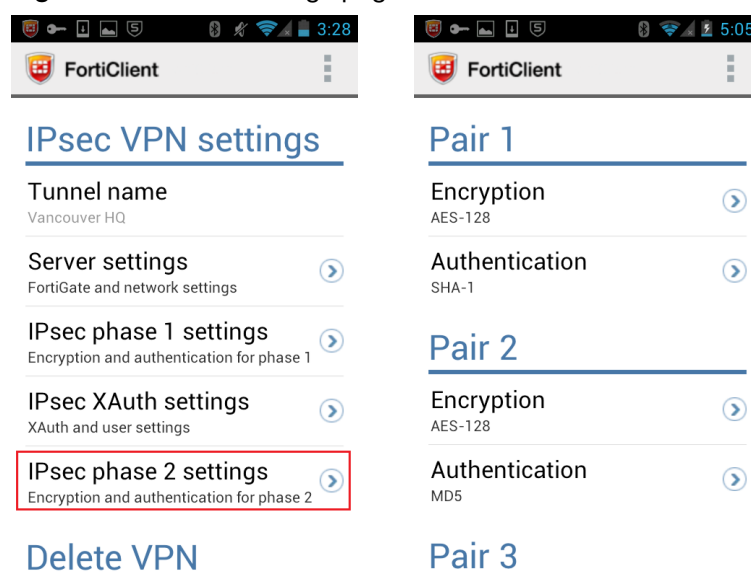
- DES: Digital Encryption Standard, a 64-bit block algorithm that uses a 56-bit key.
- 3DES: Triple-DES, in which plain text is encrypted three times by three keys.
- AES128: A 128-bit block algorithm that uses a 128-bit key.

You can select one of the following message digests to check the authenticity of messages during phase 1 negotiations:

- MD5: Message Digest 5, the hash algorithm developed by RSA Data Security.
- SHA-1: Secure Hash Algorithm 1, which produces a 160-bit message digest.

Select one or more Diffie-Hellman groups from DH group 1, 2, 5, and 14. When using aggressive mode, DH groups cannot be negotiated.

Figure 31:Phase 2 settings pages



Contact your network administrator for the correct phase 2 encryption and authentication algorithms, and DH group.

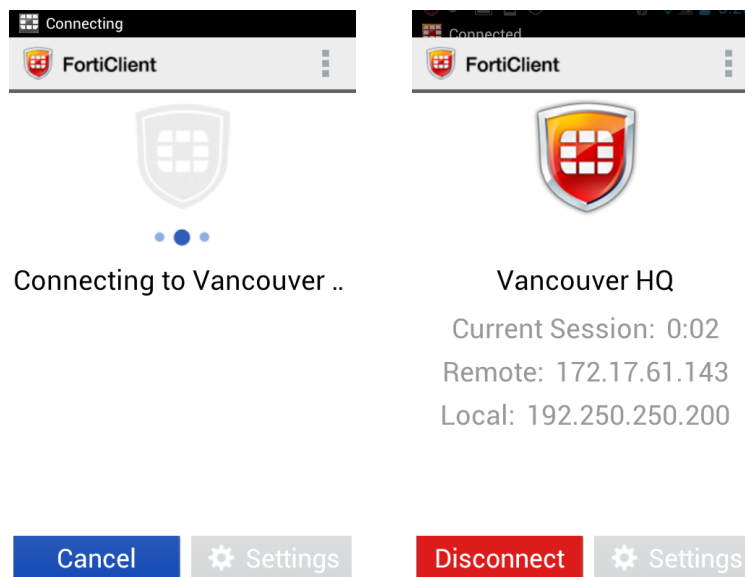
15. Select *Go Back* to return to the IPsec VPN settings page.

Connect to an IPsec VPN

Connect to an IPsec VPN:

1. Select an available IPsec VPN connection.
2. Enter the username and password, and select *Connect*.

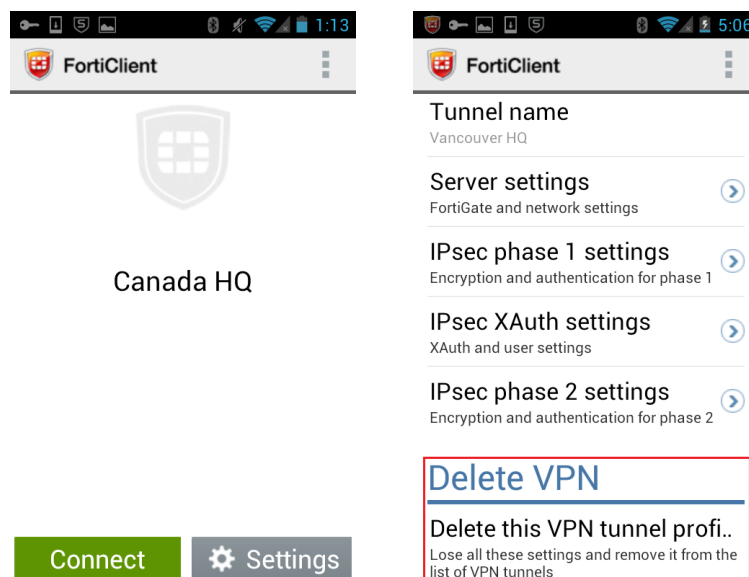
Figure 32:IPsec connection page



Edit VPN settings or delete a VPN configuration

To edit IPsec VPN settings or delete an existing IPsec VPN configuration, select the IPsec VPN, and select the *Settings* button.

Figure 33:VPN settings pages



Endpoint Control

FortiClient (Android) v5.0 Patch Release 1 allows you to register to a FortiGate device and receive an endpoint profile for endpoint control.

FortiGate endpoint profile

Configure the endpoint profile:

1. On your FortiGate device, go to *User & Device > Device > Endpoint Profile*.

Figure 34:Edit endpoint profile page

The screenshot displays the 'Edit Endpoint Profile' interface on a FortiGate device. The page is divided into sections for different operating systems: Windows and Mac, iOS, and Android. The Android section is highlighted with a red border. In the Android section, 'Web Category Filtering' is set to 'default', 'Client VPN Provisioning' is checked, and the VPN details are configured with 'Type' set to 'IPsec VPN', 'Authentication Method' set to 'Preshared Key', and a 'Preshared Key' field. The 'Apply' button is visible at the bottom of the page.

Edit Endpoint Profile default

Profile Name: default

Comments: Write a comment... 0/255

FortiClient Configuration Deployment

Windows and Mac

- ☐ AntiVirus Realtime Protection on Client
- ☐ Application Firewall
- ☐ Web Category Filtering
- ☐ Endpoint Vulnerability Scan on Client
- ☐ Client VPN Provisioning
- ☐ Upload Logs to FortiAnalyzer/FortiManager
- ☐ Use FortiManager for client software/signature update
- ☐ Advanced Options

iOS

- ☐ Web Category Filtering
- ☐ Client VPN Provisioning
- ☐ Distribute Configuration Profile (.mobileconfig file)

Android

- ☒ Web Category Filtering
- ☒ Disable Web Category Filtering when protected by this FortiGate
- ☒ Client VPN Provisioning

VPN Name:

Type: ☒ IPsec VPN ☐ SSL-VPN

Remote Gateway:

Authentication Method:

Preshared Key:

2. In the *Android* section of the page, configure the following settings:

Web Category Filtering	Toggle the button to enable or disable Web Category Filtering. Select the Web Filter profile from the drop-down list. Note: FortiClient (Android) only supports FortiGuard Categories settings in the <i>Web Filter Profile</i> . Only <i>Allow</i> and <i>Block</i> actions are supported. All other settings will be ignored by FortiClient (Android).
Disable Web Category Filtering when protected by this FortiGate	Select the checkbox to disable Web Category Filtering when protected by the FortiGate.
Client VPN Provisioning	Toggle the button to enable or disable client VPN provisioning. Select the plus (+) icon to add multiple VPN configurations.
VPN Name	Enter a name for the VPN connection.
Type	Select either IPsec VPN or SSL VPN.
Remote Gateway	Enter the remote gateway.
Authentication	Configure authentication settings. The options available are dependent on the type of VPN selected.

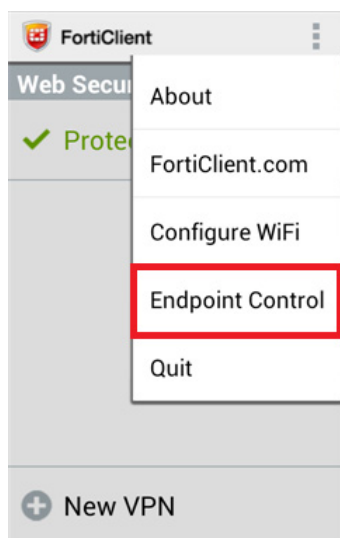
3. Select *Apply* to save the settings.

Register to FortiGate

Register to the FortiGate:

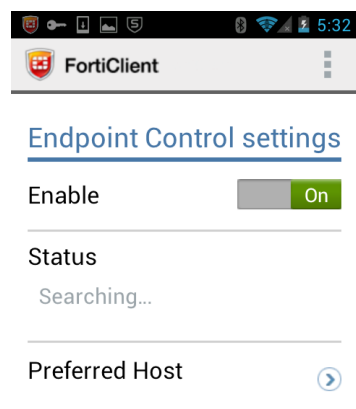
1. On your Android device, open the FortiClient application.
2. Select the menu icon in the toolbar and select *Endpoint Control*.

Figure 35:Select Endpoint Control in menu



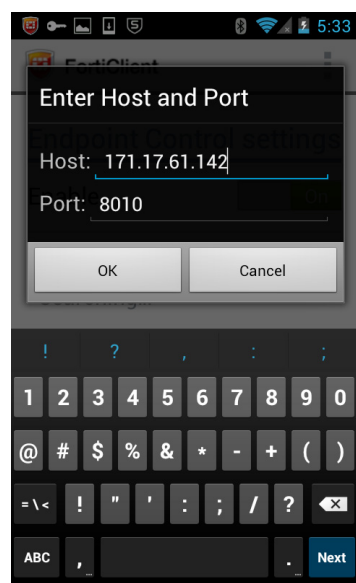
3. In *Endpoint Control* settings toggle the *Enable* switch to *On*.

Figure 36:Enable Endpoint Control



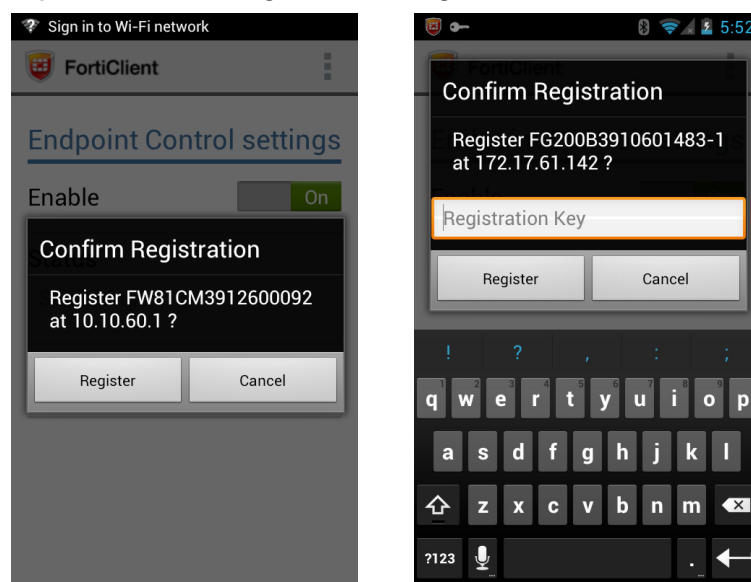
4. FortiClient (Android) will search for available FortiGate devices. Alternatively, you can select *Preferred Host* and enter the FortiGate host IP and port number.

Figure 37:Preferred host page



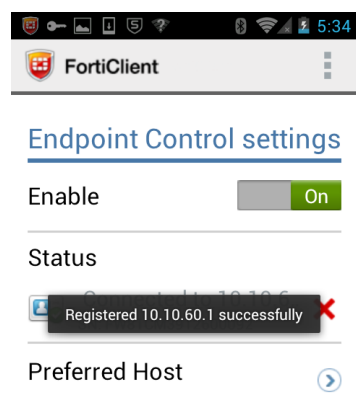
5. When a FortiGate is discovered you will receive a confirm registration dialog box with the FortiGate serial number and IP address. Depending on the FortiGate configuration, you may be required to enter a FortiClient registration key.

Figure 38:Confirm registration dialog box variations



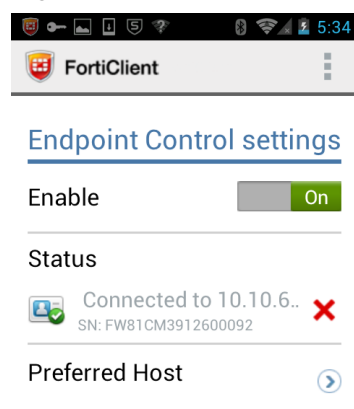
6. Select the *Register* button to continue. You will receive a confirmation dialog box when registration is complete.

Figure 39:Registration complete



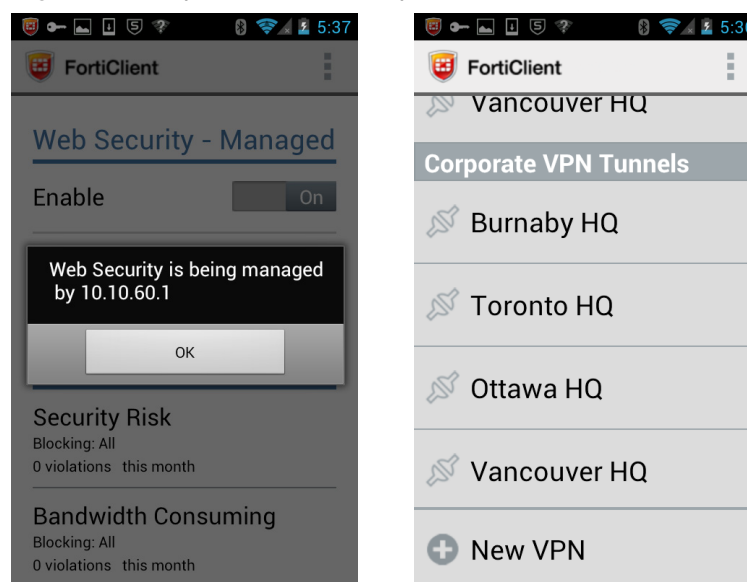
7. The *Endpoint Control settings* page will display a connected status.

Figure 40:Connected status



8. Upon successful registration with FortiGate, FortiClient (Android) will receive the endpoint profile. [Figure 41](#) provides an example of a registered FortiClient (Android) with Web Category Filtering and provisioned VPN connections.

Figure 41:Endpoint Profile example



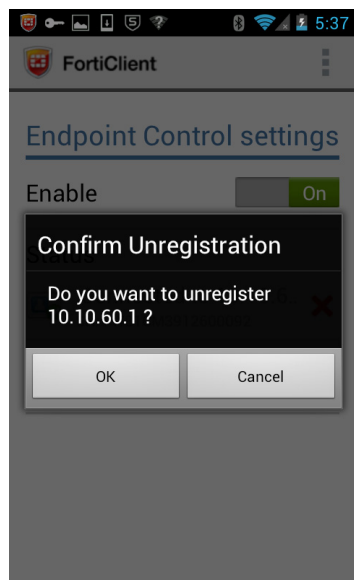
If FortiClient (Android) is registered to FortiGate, it will auto start when the phone is turned on and bring up the GUI.

Unregister from FortiGate

To unregister from FortiGate:

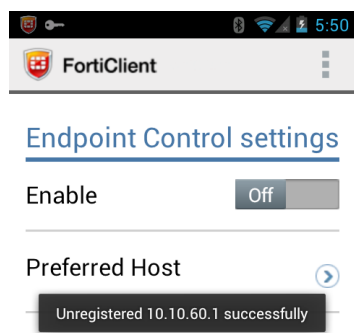
1. To unregister from FortiGate, in *Endpoint Control* settings page, in the *Status* section, select the red 'X' icon.
2. You will receive a confirmation dialog box.

Figure 42:Confirmation dialog box



3. Select *OK* to unregister from the FortiGate. You receive a confirmation dialog box advising that you are unregistered from the FortiGate.

Figure 43:Unregistered from FortiGate



4. Toggle the *Endpoint Control Enable* switch to *Off*.

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